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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,463	12/06/2004	Koji Yokoi	SOHMEI.PT1012	1354
24943 7590 04/06/2007 INTELLECTUAL PROPERTY LAW GROUP LLP 12 SOUTH FIRST STREET SUITE 1205 SAN JOSE, CA 95113			EXAMINER ABU ALI, SHUANGYI	
			ART UNIT 1755	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/517,463

Applicant(s)

YOKOI, KOJI

Examiner

Shuangyi Abu-Ali

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

(1)

Status of Claims

Claims 1, and 3-18 remain for examination wherein claims 1 and 17 are amended and claim 2 is canceled.

(2)

Response to Arguments

Applicant's arguments with respect to claims 1 and 3- 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 3-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP No. 03-153523 to Wakasa et al., in view of U.S. Patent No. 6, 841,609 B2 to Chapman et al.

Regarding claims 1 and 4, Wakasa et al. disclose specifically a laminar porous alumina particle, which has a diameter of 0.1- 50 μm , aspect ratio of 10 – 100, specific surface area of 30 – 350 m^2/g , and thickness of less than 50 μm . But they are silent about the size of the pore and oil absorption as applicant set forth in claim 1. However, Chapman et al. disclose that the pore size of porous metal oxide less than 600 Å is preferred. The pore of less than 600 Å (60 nm) will be less subjected to total collapse during coating process (col. 2, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time of invention to provide the porous metal oxide of Wakasa et al. with a pore size less than 600 Å (60 nm), as taught by Chapman et al., motivated by the fact that the pore of that size will resist total collapse in future application.

Although combining teaching of Wakasa et al. and Chapman et al. are silent about the oil absorption as set forth by applicant in claim 1. It is the position of the examiner that since oil absorption is determined by oil type and the particle structure, the claimed oil absorption would be inherent to of the combining teaching of Wakasa et al. and Chapman et al. See MPEP 2112.

Regarding claim 3, Wakasa et al. disclose that the laminar alumina will maintain the shape of original starting materials. Therefore the size of the original alumina will be in the range of 5-500 μm (page 9, lines 5-7).

Regarding claims 5 and 16, Wakasa et al are silent about silicon oxide porous material and using porous metal oxide as coating material on paper in their disclosure. However, Chapman et al disclose that porous silicon oxide can be used to form a porous layer on paper to act as ink-receptive layer (col. 3, line 55 and col.2, lines 60-62).

It would have been obvious to one of ordinary skill in the art at the time of invention to take advantage of the information disclosed by Chapman et al. about the good ink absorption properties of porous metal oxide material and therefore to use Wakasa et al. invention in paper coating material.

Regarding claims 6-7 and 9-15, Wakasa et al. disclose that since the porous laminar alumina particle has a large surface area, it can be used as a composite carrier in may applications, such as cosmetic, coating, plastic and ink (page 15, lines 17-18).

Regarding claim 8, Wakasa et al describe in their invention that the percentage of pigment contained in cosmetic composite is 23.3%(page 19, lines 8-9).

(3)

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over combining teaching of JP 03-153523 to Wakasa et al. and U.S. Patent No. 6, 841,609 B2 to Chapman et al., as set forth above, in further view of U.S. Patent No. 4,882,133 to Saegusa.

Regarding claims 17 and 18, combining teaching of Wakasa et al. and Chapman et al. disclose a composition as applicant set forth in claim 1. But they are silent about the method of making such composition as applicant set forth in claim 17.

However, Saegusa provides a same so-gel process to make flaky material (col.1 lines 60-68 and col. 4, lines 59-60).

- 1) Coating liquid sol of metallic compound, such as silica sol LudoxHs-40, which has an average size of 12 nm, on a surface to form a film;
- 2) Applying heat to solidify the film;
- 3) Removing dispersion medium from the film;
- 4) Scraping off the film from the surface;
- 5) Heating the film in the temperature range according to the finished product uses.

Therefore, it would have been obvious to one ordinary skill in the art at the time of invention to follow Saegusa method to make a porous flaky metal oxide, as Wakasa et al described in claim 1, motivated by the fact that Saegusa discloses that his method is easy to operate and the product will have uniform size, smooth surface and equivalent optical effect (col.3, lines 1-10).

(4)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time, policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuangyi Abu-Ali whose telephone number is 571-272-6453. The examiner can normally be reached on Monday - Friday 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA


J. A. LORENGO
SUPERVISORY PATENT EXAMINER